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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,082	02/17/2004	Michael L. O'Banion	0275Y-625COD	9514
27572	7590	07/07/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303				MITCHELL, KATHERINE W
ART UNIT		PAPER NUMBER		
3677				

DATE MAILED: 07/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/780,082	O'BANION ET AL.
	Examiner	Art Unit
	Katherine W. Mitchell	3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 4/21/05.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 85-110 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 92-103 is/are allowed.
- 6) Claim(s) 85-91, 104-106, 109 and 110 is/are rejected.
- 7) Claim(s) 107 and 108 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 21 April 2005 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 85, 91, and 92 are objected to because of the following informalities:

In claims 85 and 92, line 8, "nonparallel to said elongated and flange segments" could be misinterpreted, although it is understood by examiner in view of the specification and drawings. However, to avoid any confusion, examiner suggests -- nonparallel to said elongate segment and also nonparallel to said flange segment--. Appropriate correction is required.

Similarly, in claim 91 and "at least one of said angular segments and flange segments" could be misconstrued. A Markush wording would be clearer:

A Markush Group and its application are discussed in the MPEP Paragraph 2173.05(h).

Alternative expressions are permitted if they present no uncertainty or ambiguity with respect to the question of scope or clarity of the claims. One acceptable form of alternative expression, which is commonly referred to as a Markush group, recites members as being "selected from the group consisting of A, B and C." See Ex parte Markush, 1925 C.D. 126 (Comm'r Pat. 1925).

Ex parte Markush sanctions claiming a genus expressed as a group consisting of certain specified materials. Inventions in metallurgy, refractories, ceramics, pharmacy, pharmacology and biology are most frequently claimed under the Markush formula but purely mechanical features or process steps may also be claimed by using the Markush style of claiming. See Ex parte Head, 214 USPQ 551 (Bd. App. 1981); In re Gaubert, 524 F.2d 1222, 187 USPQ 664 (CCPA 1975); and In re Harnisch, 631 F.2d 716, 206 USPQ 300 (CCPA 1980). It is improper to use the term "comprising" instead of "consisting of." Ex parte Dotter, 12 USPQ 382 (Bd. App. 1931).

The use of Markush claims of diminishing scope should not, in itself, be considered a sufficient basis for objection to or rejection of claims. However, if such a practice renders the claims indefinite or if it results in undue multiplicity, an appropriate rejection should be made.

Similarly, the double inclusion of an element by members of a Markush group is not, in itself, sufficient basis for objection to or rejection of claims. Rather, the facts in each case must be evaluated to determine

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whether or not the multiple inclusion of one or more elements in a claim renders that claim indefinite. The mere fact that a compound may be embraced by more than one member of a Markush group recited in the claim does not necessarily render the scope of the claim unclear. For example, the Markush group, "selected from the group consisting of amino, halogen, nitro, chloro and alkyl" should be acceptable even though "halogen" is generic to "chloro."

The materials set forth in the Markush group ordinarily must belong to a recognized physical or chemical class or to an art-recognized class. However, when the Markush group occurs in a claim reciting a process or a combination (not a single compound), it is sufficient if the members of the group are disclosed in the specification to possess at least one property in common which is mainly responsible for their function in the claimed relationship, and it is clear from their very nature or from the prior art that all of them possess this property. While in the past the test for Markush-type claims was applied as liberally as possible, present practice which holds that claims reciting Markush groups are not generic claims (MPEP § 803) may subject the groups to a more stringent test for propriety of the recited members. Where a Markush expression is applied only to a portion of a chemical compound, the propriety of the grouping is determined by a consideration of the compound as a whole, and does not depend on there being a community of properties in the members of the Markush expression.

When materials recited in a claim are so related as to constitute a proper Markush group, they may be recited in the conventional manner, or alternatively. For example, if "wherein R is a material selected from the group consisting of A, B, C and D" is a proper limitation, then "wherein R is A, B, C or D" shall also be considered proper.

Appropriate correction is required.

2. A separate amendment clarifying these issues would be entered after final.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

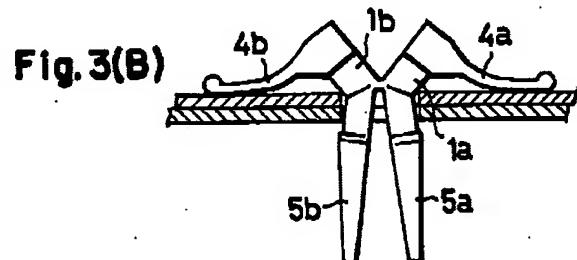
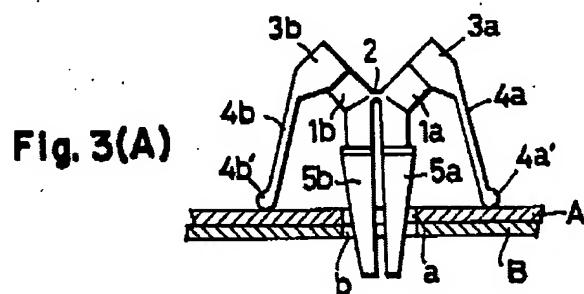
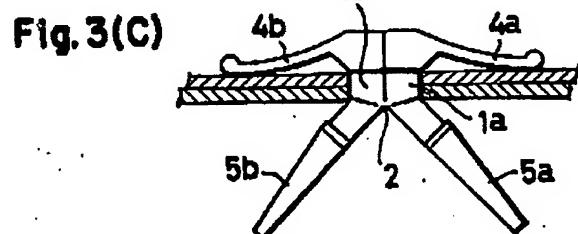
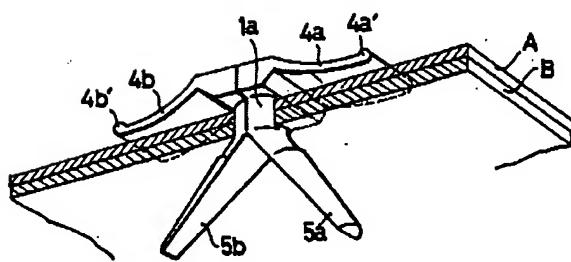
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 85-87,90-91, 104-106, and 109-110 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka USP 4112815. Tanaka teaches in Figs 2 ands 3(A) - 3(C) a nail capable of fastening framing members together, comprising

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- First member with elongated segment (5b), flange segment (formed by combination 3b,4b,4b'), and angular segment (1b) between elongated and flange segments that is not parallel to either the elongated or flange segments
- Second member with elongated segment (5a), flange segment (formed by combination 3a,4a,4a'), and angular segment (1a) between elongated and flange segments that is not parallel to either the elongated or flange segments (see below)

**F i g . 2**

- Wherein said elongated segments 5a,5b are substantially parallel to each other

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and form a tip configured to penetrate adjacent framing members prior to passing through said framing members (Fig 3(A)) and said first and second members are configured to receive a driving force that drives a portion of said 1st and 2nd members through the framing members (col 1 lines 48-67 and col 3 lines 20-col 4 line 29), said driving causes angular segments of 1st and 2nd members to move toward one another and said elongated segments to move away from each other thereby fastening said framing members (A,B) together between said elongated segments and said flange segments (Fig 3(C), and said flange segments are separate and spaced apart prior to said angular segments moving toward one another (Fig 3A, 3B).

Re claim 86: Looking at Fig 3(C), when the fastener is in the fully inserted position, the flanges are perpendicular to the angular segments.

Re claim 87: "Coupling" does not require physical joining but can include mating or pairing, and at least the very ends of the elongated segments are physically coupled at the hinge point 2 in Fig 3(A).

Verb cou·pled, cou·pling, cou·ples verb, intransitive

1. To form pairs; join.¹

Re claims 90,91: At least one of -- said angular segments or said flange

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segments-- of said first and second members is configured to receive said driving force, per Figs 3(A)-3(C) and col 1 lines 48-67 and col 3 lines 20-col 4 line 29.

Re claims 104-105, 109-110: The method is taught in Figs 3(A)-3(C) and col 1 lines 48-67 and col 3 lines 20-col 4 line 29. Note that the method does not require piercing. A force transmitting device of some kind is inherent - the device gets force through the panels/framing members. "Coupling" does not require physical joining but can include mating or pairing, and at least the very ends of the elongated segments are physically coupled at the hinge point 2.

Re claim 106: Col 5 lines 10-13 disclose that more than two panels can be joined together. The third panel is considered the back plate or support surface.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 88,89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka in view of common skill in the art. Tanaka teaches all the elements except physically coupling the elongated segments by spot welding or strap connection. Examiner takes Official Notice that temporary coupling, which can be overcome by an expansion force, is well-known in the art, and that it is also well-known to spot weld or couple with a breakable strap. Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Tanaka and common knowledge in the

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art before him at the time the invention was made, to modify Tanaka to include physically coupling the two elongated halves by spot welding or a strap, in order to obtain a tip that would not separate until after it was inserted, but could be easily separated after insertion. One would have been motivated to make such a combination because a point that is easier to insert would have been obtained, as taught/suggested by common knowledge in the art. Examiner has personally used plastic and metal expansion anchors which have a frangible connection between the expandable legs to keep the anchors parts close together prior to insertion, and that break apart to let it expand once it is fully inserted into the hole, and could provide an affidavit if required.

Response to Arguments

7. Applicant's arguments with respect to all rejected claims have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments are based on newly added limitations,

Allowable Subject Matter

8. Claims 92-103 are allowed, subject to clarification per the claim objection to claim 92 above.

9. Claims 107,108 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter:

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- Independent claim 92 requires a nail with 1st, 2nd, and 3rd members such that a driving force to the head of the 3rd member drives all 3 members thru the framing members/panels and causes outward expansion of 1st and 2nd members.

Referring to USP 3213745, Figs 1-3, examiner seriously considered whether or not 18 and 19 (as 1st and 2nd members), and screw 20 (as third member) could read on the claim. However, examiner has used fasteners very similar, and is confident that anyone trying to insert all three members together, even with a predrilled hole, will find this shortcut of simultaneous insertion will not work. 1st and 2nd members must be inserted first, and then the 3rd member (screw) can be inserted to expand them - as shown in the Figures. Examiner has used both metal and plastic anchors as the 1st and 2nd members, and the result is the same - they must be inserted prior to the 3rd member being driven in or they end up damaged and unusable. Examiner has even tried to substitute a nail for the threaded 3rd member 20, and then withdrawn the nail and inserted a screw - this too does not work. The elongated sections must be very very close together to be successfully inserted and then expanded by a 3rd member, and thus the reference is not capable of meeting all the claim functional limitations.

- The method of claims 107 and 108, while not explicitly requiring the force driving the 3rd member to also drive members 1 and 2, still requires the 3rd member to be positioned between the two elongated 1st and 2nd members prior to the passing through the framing members. However, the elongated 1st and 2nd members have already passed through the hole if they were inserted without the 3rd

member, and thus the 3rd member would be positioned between the flanges before it passes through the framing members/panels.

11. Examiner notes for consideration by applicant that limitations such as a self-piercing tip were considered to see if such an additional limitation would make claim 85 allowable, and examiner does not believe it would even if it were claimed. However, it appears, subject to a further search if it were claimed, that the prior art of record does require more resilience of the 1st and 2nd elongated members/ flange members than required by applicant's invention, and that may be an avenue of possible allowability, remembering that "resilient" is very broad and relative and would need to be narrowly claimed. This is merely a suggestion based on what examiner has viewed of the prior art of record.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
14. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

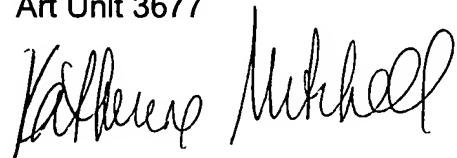
15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine W. Mitchell whose telephone number is 571-272-7069. The examiner can normally be reached on Mon - Thurs 10 AM - 8 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Katherine W Mitchell
Examiner
Art Unit 3677

Kwm
6/30/2005





REPLACEMENT SHEETS
Serial No. 10/780,082 - Filed: 02/17/04
Atty. Ref.: 0275Y-000625/COD
Harness, Dickey & Pierce, P.L.C. (248) 641-1600

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Approved
PM
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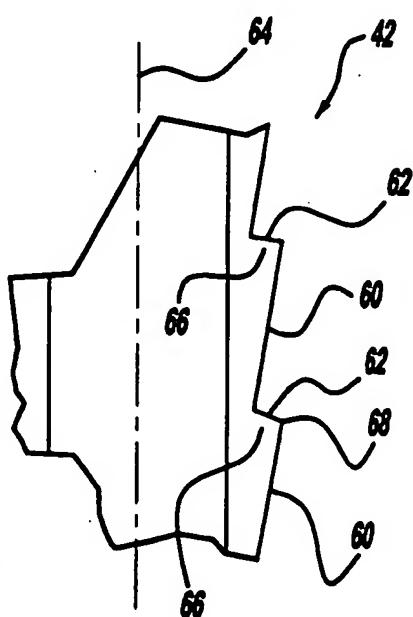
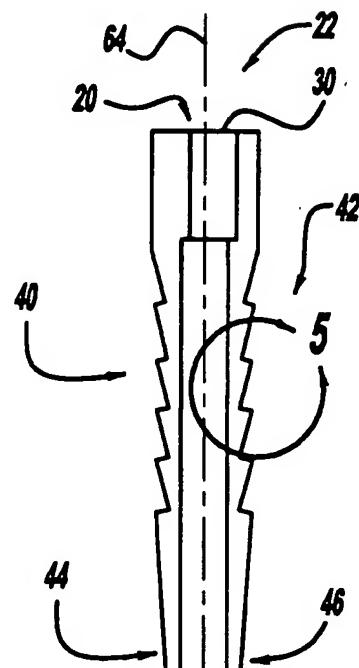
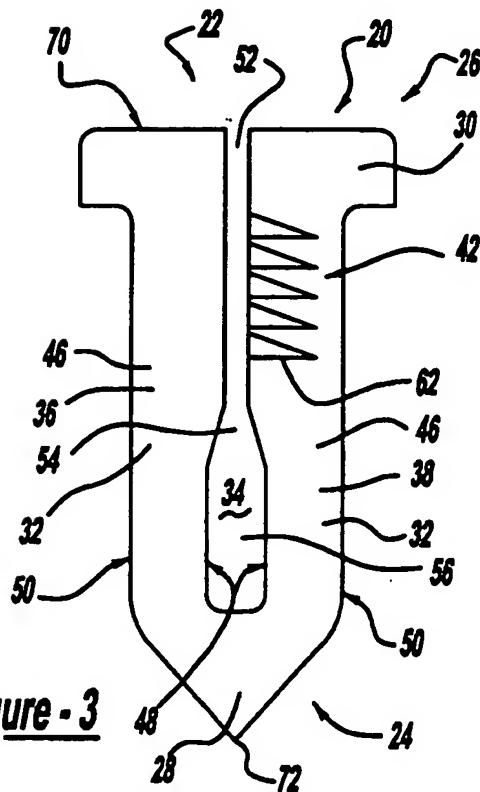


Figure - 4

Figure - 5

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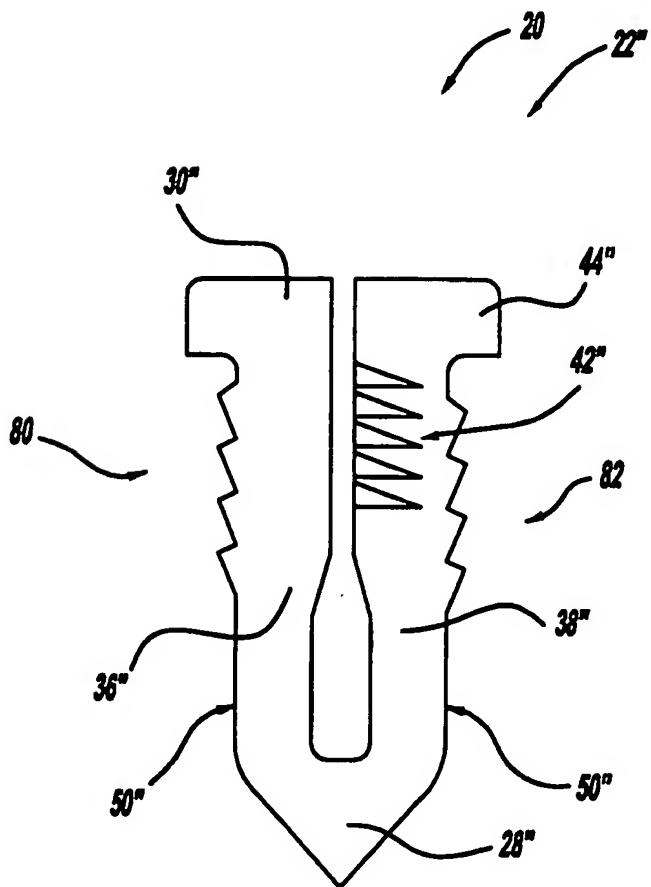


Figure - 11